Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) An image processing device, comprising:

a region segmentation device that segments a target image composed of a plurality of pixels into a plurality of image object regions by employing, as boundaries, portions where characteristics between the pixels change; and

an image correction device that corrects the pixel information of the pixels constituting the image object region based on region characteristic information indicating a ~~representative~~ statistical value that represents a characteristic of the image object region, for each of the image object region segmented by the region segmentation device, wherein the image correction device corrects the pixel information of the pixels constituting the portions based on characteristic information of two image object regions that surround the portions.

2.   (Canceled)

3.   (Original) The image processing device according to claim 1, the image correction device further comprising:

a region characteristic calculation device that calculates the region characteristic information of the image object region based on the pixel information of the pixels constituting the image object region;

a correction function setting device that sets a correction function for correcting the pixel information of the pixels constituting the image object region based on the region characteristic information of the image object region calculated by the region characteristic calculation device; and

a pixel information correction device that corrects the pixel information of the pixels constituting the image object region based on the correction function that was set by the correction function setting device.

4.   (Canceled)

5.   (Original) The image processing device according to claim 3,

the correction function setting device mapping the correction function with application conditions that define a plurality of the region characteristic information conditions retrieving the correction function corresponding to the application conditions that are satisfied by the region characteristic information from the plurality of correction functions based on the region characteristic information of the image object region.

6.   (Canceled)

7.   (Original) The image processing device according to claim 5, the correction function setting device retrieving the application conditions to which the region characteristic information of the image object region corresponds, based on a correction function table that maps and registers a plurality of application conditions and correction functions, and retrieves the correction function corresponding to the retrieved application conditions.

8.   (Canceled)

9.   (Previously Presented) The image processing device according to claim 7 the correction function setting device setting any one of the correction function table of a plurality of the different correction function tables with respect to one or a plurality of the image object regions and setting the correction function that corrects the pixel information of the pixels constituting the image object region based on the region characteristic information of the image object region and the correction function table that was thus set.

10.   (Original) The image processing device according to claim 1, the region segmentation device including a boundary region detection device that detects, based on

prescribed region recognition conditions, as a boundary region, the pixel group which is the pixel group present on a boundary of the two adjacent image object regions and in the vicinity thereof and is composed of the pixels having characteristics intermediate between the respective characteristics of the two image object regions.

11.   (Original) The image processing device according to claim 1, the region segmentation device including a boundary region detection device that detects, based on prescribed region recognition conditions, as a boundary region of a first image object region and a second image object region, a boundary pixel group sandwiched by a first pixel group composed of pixels having characteristics of the first image object region and a second pixel group composed of pixels having characteristics of the second image object region, where one of the image object region of an adjacent image object region is considered as the first image object region and the other image object region is considered as the second image object region.

12.   (Original) The image processing device according to claim 10, the correction function setting device correcting the pixel information of the pixels constituting the boundary region based on a first correction function which is the correction function set by the region characteristic information of the first image object region and a second correction function which is the correction function set by the region characteristic information of the second image object region, where the first image object region and second image object region are the two image object regions sandwiching the boundary region.

13.   (Currently Amended) An image processing method, comprising:

a region segmentation step of segmenting a target image composed of a plurality of pixels into a plurality of image object regions by employing, as boundaries, portions where characteristics between the pixels change; and

an image correction step of correcting the pixel information of the pixels

constituting the image object region based on region characteristic information indicating a

~~representative~~ statistical value that represents a characteristic of the image object region, for

each of the image object region segmented in the region ~~segmentationstep~~segmentation step,

wherein the image correction step corrects the pixel information of the pixels constituting the

portions based on characteristic information of two image object regions that surround the

portions.

14.   (Original) The image processing method according to claim 13, the image

correction step, further comprising:

a region characteristic calculation step of calculating the region characteristic

information of the image object region based on the pixel information of the pixels

constituting the image object region;

a correction function setting step of setting a correction function that corrects

the pixel information of the pixels constituting the image object region based on the region

characteristic information of the image object region calculated in the region characteristic

calculation step; and

a pixel information correction step of correcting the pixel information of the

pixels constituting the image object region based on the correction function that was set in the

correction function setting step.

15.   (Original) The image processing method according to claim 13, the region

segmentation step, further comprises:

a boundary region detection step of detecting, based on prescribed region

recognition conditions, as a boundary region, the pixel group which is the pixel group present

on the boundary of the two adjacent image object regions and in a vicinity thereof and is

composed of the pixels having characteristics intermediate between the respective characteristics of the two image object regions.

16.   (Currently Amended) A computer-readable storage medium storing a program causing a computer to execute each of the following steps of an image processing method:

a region segmentation step of segmenting a target image composed of a plurality of pixels into a plurality of image object regions by employing as boundaries portions where characteristics between the pixels change; and

an image correction step of correcting the pixel information of the pixels constituting the image object region based on region characteristic information indicating a ~~representative~~-statistical value that represents a characteristic of the image object region, for each of the image object region segmented in the region segmentation step, wherein the image correction step corrects the pixel information of the pixels constituting the portions based on characteristic information of two image object regions that surround the portions.

17.   (Previously Presented) The program according to claim 16 for executing each of the following steps comprised in the image correction step of an image processing method:

a region characteristic calculation step of calculating the region characteristic information of the image object region based on the pixel information of the pixels constituting the image object region;

a correction function setting step of setting a correction function for correcting the pixel information of the pixels constituting the image object region based on the region characteristic information of the image object region calculated in the region characteristic calculation step; and

a pixel information correction step of correcting the pixel information of the pixels constituting the image object region based on the correction function that was set in the correction function setting step.

18.   (Previously Presented) The program according to claim 16 for executing the

following step comprised in the region segmentation step of an image processing method:

a boundary region detection step of detecting, based on prescribed region

recognition conditions, as a boundary region, the pixel group which is the pixel group present

on the boundary of the two adjacent image object regions and in the vicinity thereof and is

composed of the pixels having characteristics intermediate between the respective

characteristics of the two image object regions.